ABSTRACT OF THE DISCLOSURE

An optical modulator used for optically modulating electromagnetic energy. The optical modulator comprises a substrate and three substantially planar reflectors arranged substantially mutually orthogonal to each other. The planar reflectors comprise a base reflector disposed substantially in the plane of the substrate and first and second side reflectors operably coupled to the base reflector. The optical modulator further comprises a pair of electrically conductive traces operably connected to the base reflector, an electrically conductive pad operably connected to each of the conductive traces, at least one material layer deposited on the base reflector by which its reflection properties may be altered or modulated with an applied voltage, and a biasing source operably coupled to said conductive pads for providing a modulated voltage to the base reflector.